WIC-2630

PATENT

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What is claimed is:

1		1.	A vessel for cell culture comprising:		
2		a head	plate having a circumferential edge; and		
3		a colla	psible bag with an inner surface, an outer surface and a top periphery,		
4		with sa	aid top periphery of said bag sealed to said edge of said headplate.		
1		2.	The vessel of claim 1 wherein said bag is comprised of polyethylene.		
1		3.	The vessel of claim 1 wherein said vessel is pre-sterilized.		
1		4.	The vessel of claim 1 wherein said headplate comprises at least one port.		
1		5.	The vessel of claim 1 further comprising an impeller having a flexible		
2	blade.				
1	,	6.	The vessel of claim 5 wherein said impeller is comprised of		
2	polyethylene.				
1		7.	The vessel of claim 5 wherein said impeller is comprised of a hollow		
2	flexible shaft having a top region and a bottom region, with said top region connected to said				
3	headplate.				
1		8.	The vessel of claim 7 wherein said flexible blade is connected to said		
2	bottom region of said shaft.				
1		9.	The vessel of claim 8 wherein said flexible blade is contiguous with said		
2	shaft.				
1		10.	The vessel of claim 7 wherein said shaft contains a magnet.		
1		11.	The vessel of claim 7 wherein said top region of said shaft comprises		
2	means for restricting movement of said shaft to a periodic pendulum-like rotation.				
1		12.	The vessel of claim 11 wherein said means comprises an o-ring.		

1		13.	A vessel for cell culture comprising:		
2		a head	plate;		
3		a pre-s	terilized collapsible bag sealed to said headplate;		
4		an imp	seller comprising a hollow flexible shaft connected to said headplate;		
5		two fle	exible blades attached to said impeller; and		
6		a constriction device o-ring disposed on said flexible shaft.			
1	said hollow flo	14. exible s	The vessel of claim 13 wherein said headplate has a port for accessing haft of said impeller.		
3 4	bottom region	15. , said bo	An impeller comprising a hollow flexible shaft having a top region and a ottom region having a flexible blade.		
1 2	flexible blades	16. s.	The impeller of claim 15 wherein said bottom region comprises two		
1 2	magnet.	17.	The impeller of claim 15 wherein said hollow flexible shaft contains a		
1	polyethylene.	18.	The impeller of claim 15 wherein said impeller is comprised of		
1		19.	The impeller of claim 17 wherein said magnet is removable.		
i		20.	A method of mixing a fluid comprising the steps of:		
2		providi	ng a vessel comprising a collapsible bag containing an impeller		
3	comprised of a	hollow	flexible shaft;		
ı		insertir	ng a magnet into said hollow shaft of said impeller;		
5		introdu	cing an external magnetic source to interact with said magnet and cause		
5	said magnet and said hollow shaft to move; and				

,	removing said magnet from said notion shall of said impener.				
1	21. The method of claim 20 further comprising disposing of said vessel.				
1	22. The method of claim 20 wherein said vessel further comprises a				
2	headplate and said hollow flexible shaft of said impeller further comprises a top region and a				
3	bottom region, wherein said top region is connected to said headplate.				
1	23. The method of culturing cells in a pre-sterilized vessel comprising a				
2	collapsible bag with a headplate and an impeller comprised of a hollow flexible shaft having a				
3					
4	wherein said bottom region comprises a flexible blade comprising the steps of the method of:				
5	inserting a magnet into said hollow shaft of said impeller;				
6	introducing a cell line and media into said vessel;				
7	allowing said cell line to proliferate;				
8	removing said cell line and media from said vessel;				
9	removing said magnet from said hollow shaft of said impeller; and				
10	disposing of said vessel.				
1	24. A method of culturing cells in a collapsible vessel containing an impelled				
2	having a hollow shaft, the method comprising the steps of:				
3	inserting a magnet into said hollow shaft;				
4	introducing an external magnetic source to interact with said magnet and cause				
5	said magnet and said hollow shaft to move; and				
6	removing said magnet from said hollow shaft.				
1	25. The method of claim 24 further comprising the step of disposing of said				
2	vessel.				